Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-16 (Cancelled).

17 (Current Amended). A process for upregulating T-cell cytokine secretion, T-cell adhesion or T-cell chemotactic migration ~~activity~~ in a mammalian subject, comprising:

treating a population of T-cells *ex vivo* with a molecule that causes stimulation of glutamate receptor activation in an amount sufficient to stimulate glutamate receptor activation, thereby upregulating T-cell cytokine secretion, T-cell adhesion or T-cell chemotactic migration~~activity~~, said molecule being selected from the group consisting of:

(a) glutamate;

(b) a glutamate analog that ~~has a substantial degree of structural identity to glutamate and that~~ stimulates glutamate receptor activation as measured by upregulation of T-cell cytokine secretion, adhesion, or chemotactic migration;

(c) an anti-glutamate receptor antibody that stimulates glutamate receptor activation as measured by upregulation of T-cell cytokine

secretion, adhesion, or chemotactic migration; and

(d) an expressible polynucleotide encoding a glutamate receptor, and

administering said treated T-cell population to the subject.

18 (Previously Presented). The process of claim 17, wherein said molecule is glutamate.

19 (Previously Presented). The process of claim 17, wherein said molecule is a glutamate analog of (b).

20 (Withdrawn). The process of claim 17, wherein said molecule is an antibody of (c).

21 (Withdrawn). The process of claim 17, wherein said molecule is a polynucleotide of (d).

22 (Currently Amended/Withdrawn). The process of claim 21, wherein said molecule is a polynucleotide of SEQ ID NO:1 ~~of~~ or SEQ ID NO:2.

23 (Previously Presented). The process of claim 17, wherein said subject is suffering from a disease or condition selected from the group consisting of a neoplastic disease other than a T-cell cancer, an infectious disease or an infection, a congenital immune deficiency, an acquired immune deficiency, a neurological disease or injury, and a psychopathology.

24 (Previously Presented). The process of claim 23, wherein said disease or condition is a neoplastic disease other than a T-cell cancer.

25 (Withdrawn). The process of claim 23, wherein said disease or condition is an infectious disease or an infection.

26 (Previously Presented). The process of claim 17, wherein said glutamate receptor is an ionotropic glutamate receptor.

27 (Previously Presented). The process of claim 26, wherein said glutamate receptor is GluR3.